

...completed examining records

S4 5 RD (unique items)  
?show files;ds;t/3,k/all  
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File 399: CA SEARCH(R) 1967-2002/UD=13711  
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 (c) format only 2002 Dialog Corporation  
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 (c) 2002 BLHCIS  
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 (c)2002 Amer Med Assn -FARS/DARS apply  
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 (c) 2002 Mass. Med. Soc.  
 File 467:ExtraMED(tm) 2000/Dec  
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Set	Items	Description
S1	5	AMIDITE? (S) ACETAL?
S2	4	RD (unique items)
S3	10	(ACETAL? OR POLYACETAL?) (S) CONJUGAT? (S) (NUCLEIC OR POL- YNUCLEOTIDE? OR OLIGONUCLEOTIDE?)
S4	5	RD (unique items)

Set	Items	Description
S1	5	AMIDITE? (S) ACETAL?
S2	4	RD (unique items)
S3	10	(ACETAL? OR POLYACETAL?) (S) CONJUGAT? (S) (NUCLEIC OR POLYNUCLEOTIDE? OR OLIGONUCLEOTIDE?)
S4	5	RD (unique items)

>>>KWIC option is not available in file(s): 41, 77, 399

**4/3,K/1 (Item 1 from file: 5)**  
 DIALOG(R)File 5:Biosis Previews(R)  
 (c) 2002 BIOSIS. All rts. reserv.

11080383 BIOSIS NO.: 199799701528  
**\*Acetal\* \*oligonucleotide\* \*conjugates\* in antisense strategy.**  
 AUTHOR: Matysiak S(a); Frank R; Pfleiderer W  
 AUTHOR ADDRESS: (a)Natl. Res. Inst. Biotechnol., Dep. Molecular  
 Recognition, Mascheroder Weg, D-38124 Braunschweig\*\*Germany  
 JOURNAL: Nucleosides & Nucleotides 16 (5-6):p855-861(1997)  
 ISSN: 0732-8311  
 RECORD TYPE: Abstract  
 LANGUAGE: English

**\*Acetal\* \*oligonucleotide\* \*conjugates\* in antisense strategy.**  
 MISCELLANEOUS TERMS: ...\*ACETAL\* \*OLIGONUCLEOTIDE\* \*CONJUGATES\*;

**4/3,K/2 (Item 1 from file: 399)**  
 DIALOG(R)File 399:CA SEARCH(R)  
 (c) 2002 American Chemical Society. All rts. reserv.

**104202002 CA: 104(23)202002d JOURNAL**  
**N-Nitrosodiethanolamine is activated in the rat to an ultimate genotoxic metabolite by sulfotransferase**  
 AUTHOR(S): Sterzel, W.; Eisenbrand, G.  
 LOCATION: Dep. Food Chem. Environ. Toxicol., Univ. Kaiserslautern, D-6750  
 , Kaiserslautern, Fed. Rep. Ger.  
 JOURNAL: J. Cancer Res. Clin. Oncol. DATE: 1986 VOLUME: 111 NUMBER: 1  
 PAGES: 20-4 CODEN: JCROD7 ISSN: 0171-5216 LANGUAGE: English

**4/3,K/3 (Item 1 from file: 315)**  
 DIALOG(R)File 315:ChemEng & Biotec Abs  
 (c) 2002 DECHEMA. All rts. reserv.

400468 CEABA Accession No.: 27-12-024892 DOCUMENT TYPE: Journal  
**Title: Synthesis of poly[N-2,2 dimethoxyethyl)-N-methyl acrylamide] for the immobilization of oligonucleotides.**  
 AUTHOR: Delair, T. ; Veron, L. ; De Bignicourt, M.-C. ; Pichot, C. ;  
 Mandrand, B.  
 CORPORATE SOURCE: UMR 103 CNRS-bioMerieux 69364 Lyon France  
 JOURNAL: J. Appl. Polym. Sci., Volume: 60, Issue: 2, Page(s): 235-244  
 CODEN: JAPNAB ISSN: 00218995  
 PUBLICATION DATE: 11 Apr 1996 (960411) LANGUAGE: English

ABSTRACT: The synthesis of \*acetal\* containing water soluble polymers for the immobilization of \*oligonucleotides\* is reported. The molecular weights of the polymers were determined and the Mark-Houwink-Sakurada relationship was established. The aldehyde moieties on the polymer were ...

... was analyzed. Covalent bonding of oligodeoxyribonucleotides was carried out in water/acetonitrile mixtures and followed by reduction of the imine bonds to stabilize the polymer/\*oligonucleotide\* \*conjugates\*.

**4/3,K/4 (Item 1 from file: 357)**  
 DIALOG(R)File 357:Derwent Biotech Res.

(c) 2002 Thomson Derwent & ISI. All rts. reserv.

0200955 DBA Accession No.: 96-11726 PATENT

**Inhibiting growth of tumor cells - vector-mediated antisense  
oligonucleotide or oligonucleotide analog expression for fibroblast  
growth factor receptor-1 gene inhibition and glioma or glioblastoma  
therapy**

AUTHOR: Morrison R S; Tseng B Y; Brown B D

CORPORATE SOURCE: San Diego, CA, USA.

PATENT ASSIGNEE: Genta; Morrison R S 1996

PATENT NUMBER: WO 9621471 PATENT DATE: 960718 WPI ACCESSION NO.:  
96-342063 (9634)

PRIORITY APPLIC. NO.: US 371001 APPLIC. DATE: 950110

NATIONAL APPLIC. NO.: WO 96US331 APPLIC. DATE: 960111

LANGUAGE: English

...ABSTRACT: contacted with tumor cells expressing FGFR1. (I) binds FGFR1 alpha exon pre-mRNA and has the disclosed DNA sequence. (I) is a DNA or RNA \*oligonucleotide\* or an \*oligonucleotide\* analog (2'-O-alkyl sugar modified, methylphosphonate, phosphorothioate, phosphorodithioate, \*formacetal\*, 3'-\*thioformacetal\*, sulfone, sulfamate, nitroxide backbone modified amide, base moiety modified, morpholino, peptide \*nucleic\* acid or chimeric \*conjugate\*). Also new are: (I) compositions for inhibiting glioma or glioblastoma cell growth; a vector for transfecting human tumor cells comprising antisense (I), which reduces expression...

... tumor cells; a method for suppressing tumor cell growth, which involves introducing (I) to tumor cells which express the FGFR1 gene; use of the antisense \*oligonucleotide\* at 0.01-50 uM; and a method for transfecting tumor cells with the vector. (71pp)

**4/3,K/5 (Item 1 from file: 35)**

DIALOG(R)File 35:Dissertation Abs Online

(c) 2002 ProQuest Info&Learning. All rts. reserv.

01530524 ORDER NO: AAD97-05422

**STUDIES ON LIPID PEROXIDATION IN BRAIN, HEART AND LIVER DURING OXIDATIVE  
STRESS**

Author: GUNNETT, CAROL A.

Degree: PH.D.

Year: 1996

Corporate Source/Institution: UNIVERSITY OF GEORGIA (0077)

Source: VOLUME 57/09-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 5590. 143 PAGES

...defenses. Oxidative free radicals are normal by products of oxidative metabolism and antioxidant defenses normally quench these free radicals before they damage lipids, proteins and \*nucleic\* acids. This dissertation describes the results and interpretation of three studies on lipid peroxidation and glutathione (GSH) status in brain, heart and liver during several...

...Dawley rats. Accelerated rates of lipid peroxidation and decreased cytosolic glutathione (a high (capacity antioxidant) status were measured as indices of oxidative stress. The glutathione-\*conjugating\* compound, 2-cyclohexene-1-one (CHX) was tested alone and during either ethanol or \*acetaldehyde\* intoxication for its ability to (1) deplete glutathione and (2) promote lipid peroxidation in brain, heart and liver. CHX, ethanol and \*acetaldehyde\* each reduced glutathione status. CHX was found to be an effective and rapid depletor of glutathione in brain, indicating it is a useful tool to...

...stress in most tissues; however, the degree of glutathione depletion per se was not consistently predictive of the degree of lipid peroxidation promoted by ethanol, \*acetaldehyde\* or CHX.

Peroxidation did not correlate well with decreased GSH. Ethanol

administered as anesthetic rapidly (within 15 min) produced lipid peroxidation in all three brain...

?

AUTHOR: Muehlegger K; von der Eltz H; Seela F; Rosemeyer H  
CORPORATE SOURCE: Mannheim, Germany.  
PATENT ASSIGNEE: Boehr.Mannheim 1996  
PATENT NUMBER: WO 9628460 PATENT DATE: 960919 WPI ACCESSION NO.:  
96-433756 (9643)  
PRIORITY APPLIC. NO.: DE 1009038 APPLIC. DATE: 950314  
NATIONAL APPLIC. NO.: WO 96EP1051 APPLIC. DATE: 960312  
LANGUAGE: German

...ABSTRACT: thio or amino, COOH, alkyl, alkenyl, aryl, alkoxy, aryloxy, aralkyl, aralkoxy or label (fluorescence, luminescence, etc.), R5-6 = H, OH, optionally substituted thio or amino, \*phosphoramidite\*, H-phosphonate, cleavable ester or amide or label, R6-R7 may form a 2'-3' bond or \*acetal\*, R8 = H, OH or optionally substituted thio or amino, and R9 = H, mono-, di- or triphosphate, thiophosphate analog or a protecting group), or its tautomer...

2/3,K/4 (Item 3 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
(c) 2002 Thomson Derwent & ISI. All rts. reserv.

0114221 DBA Accession No.: 91-01863

**Fast oligonucleotide deprotection phosphoramidite chemistry for DNA synthesis - dialkylformamidine, isobutryl deprotection of cyanoethylphosphoramidite nucleoside**

AUTHOR: Vu H; McCollum C; Jacobson K; Theisen P; Vinayak R; Spiess E  
CORPORATE AFFILIATE: Appl.Biosystems  
CORPORATE SOURCE: Applied Biosystems Inc., 850 Lincoln Centre Dr., Foster City, CA 94404, USA.  
JOURNAL: Tetrahedron Lett. (31, 50, 7269-72) 1990  
CODEN: TELEAY  
LANGUAGE: English

ABSTRACT: Base protecting groups for \*cyanoethylphosphoramidite\* nucleosides and supports have been developed. Traditional purine amide protecting groups requiring 8-16 hr at 55 deg for deprotection in ammonia, have been replaced...

...a dimethylformamidine group. Oligonucleotides made with the new reagents required only 1 hr at 55 deg or 8 hr at RT for complete deprotection. Dialkylformamidine \*phosphoramidites\* exhibit enhanced resistance to depurination. N2-Dimethylformamidine-2'-deoxyguanosine was prepared by reacting 2'-deoxyguanosine with N,N-dimethylformamide dimethyl \*acetal\* in methanol. The product was tritylated with 4,4'-dimethoxytrityl chloride in pyridine. After recrystallization, 5'-dimethoxytrityl-N2-dimethylformamidine-2'-deoxyguanosine resulted as a white powder (yield 78%). Conversion to N2-dimethylformamidine-2'-deoxyguanosine-3'-diisopropylaminocyanoethyl \*phosphoramidite\* was effected by treatment with bis(diisopropylamino)cyanoethyl phosphine and diisopropylammonium tetrazolide. The deprotecting \*phosphoramidites\* may be applied to the production of quality oligonucleotides in high yield. (14 ref)

Set        Items    Description  
S1            5    AMIDITE? (S) ACETAL?  
S2            4    RD (unique items)  
>>>KWIC option is not available in file(s): 41, 77, 399

2/3,K/1        (Item 1 from file: 98)  
DIALOG(R)File 98:General Sci Abs/Full-Text  
(c) 2002 The HW Wilson Co. All rts. reserv.

04010754        H.W. WILSON RECORD NUMBER: BGS199010754  
**Catalytic enantioselective annulations via 1,4-addition-aldol cyclization  
of functionalized organozinc reagents.**  
Naasz, Robert  
Arnold, Leggy A; Pineschi, Mauro  
Journal of the American Chemical Society (J Am Chem Soc) v. 121 no5 (Feb.  
10 '99) p. 1104-5  
SPECIAL FEATURES: bibl il    ISSN: 0002-7863  
LANGUAGE: English  
COUNTRY OF PUBLICATION: United States

...ABSTRACT: in highly selective annulations of cyclic alkenones is reported. The treatment of a cyclohexenone at -30{degree}C with a functionalized diaklyzinc reagent containing an \*acetal\* group at C(4) in the presence of a catalyst prepared in situ from Cu(OTf)2 and a phosphorus \*amidite\* afforded the corresponding 4-substituted cyclohexanone in 91 percent yield and 98 percent ee. Treatment of a THF solution of this cyclohexanone with aqueous HCl at room temperature led to \*acetal\* hydrolysis and ring closure to give the corresponding decalone in 97 percent ee. This annulation methodology was also used to carry out catalytic enantioselective tandem...

2/3,K/2        (Item 1 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
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0275421 DBA Accession No.: 2001-15628  
**Attachment of benzaldehyde-modified oligodeoxynucleotide probes to  
semicarbazide-coated glass - DNA synthesis and DNA probe immobilization  
on glass slide support matrix for DNA microarray construction,  
genotyping and single nucleotide polymorphism detection**  
AUTHOR: Podyminogin M A; Lukhtanov E A; +Reed M W  
CORPORATE AFFILIATE: Epoch-Biosciences  
CORPORATE SOURCE: Epoch Biosciences, 21720 23rd Drive SE 150, Bothell, EA  
98021, USA. email:mreed@ epochbio.com  
JOURNAL: Nucleic Acids Res. (29, 24, 5090-98) 2001  
ISSN: 0305-1048 CODEN: NARHAD  
LANGUAGE: English

...ABSTRACT: semicarbazide-coated glass for preparation of DNA microarrays was evaluated. All benzaldehyde-modified oligonucleotides used were synthesized on an ABI 394 DNA synthesizer using standard \*phosphoramidite\* chemistry with an \*acetal\*-protected benzaldehyde \*phosphoramidite\* reagent. Immobilization of oligonucleotides containing benzaldehyde groups was performed using semicarbazide-coated glass slides. The hydrophobic protecting group simplified purification of benzaldehyde-modified oligonucleotides by...

2/3,K/3        (Item 2 from file: 357)  
DIALOG(R)File 357:Derwent Biotech Res.  
(c) 2002 Thomson Derwent & ISI. All rts. reserv.

0203211 DBA Accession No.: 96-13982        PATENT  
**New chemically stable C-nucleoside derivatives for labeling nucleic acid -  
or DNA sequencing, oligonucleotide synthesis, DNA probe construction,  
etc.**

?rd

...completed examining records

S8 14 RD (unique items)

?show files;ds;t/3,k/all

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File 172: EMBASE Alert 2002/Sep W2  
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(c) 2002 Royal Soc Chemistry

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File 370: Science 1996-1999/Jul W3  
(c) 1999 AAAS

File 399: CA SEARCH(R) 1967-2002/UD=13711  
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(c) 2002 NewsRx

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(c) 2002 DECHEMA

File 357: Derwent Biotech Res. 1982-2002/June W1  
(c) 2002 Thomson Derwent & ISI

File 358: Current BioTech Abs 1983-2001/Oct  
(c) 2001 DECHEMA



File 35:Dissertation Abs Online 1861-2002/Aug  
 (c) 2002 ProQuest Info&Learning  
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 (c) 2002 Sport Information Resource Centre  
 File 91:MANTIS(TM) 1880-2002/Oct  
 2001 (c) Action Potential  
 File 149:TGG Health&Wellness DB(SM) 1976-2002/Sep W1  
 (c) 2002 The Gale Group  
 File 159:Cancerlit 1975-2002/Jul  
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 File 164:Allied & Complementary Medicine 1984-2002/Sep  
 (c) 2002 BLHCIS  
 File 442:AMA Journals 1982-2002/Aug B1  
 (c)2002 Amer Med Assn -FARS/DARS apply  
 File 444:New England Journal of Med. 1985-2002/Sep W2  
 (c) 2002 Mass. Med. Soc.  
 File 467:ExtraMED(tm) 2000/Dec  
 (c) 2001 Informania Ltd.

Set	Items	Description
S1	2	POLYACETAL? (S) (NUCLEIC OR POLYNUCLEOTIDE? OR OLIGONUCLEO-TIDE?)
S2	2	RD (unique items)
S3	0	?HYDROXYMETHYLETHYLENE (W) HYDROXYMETHYLFORMAL?
S4	0	HYDROXYMETHYLENE HYDROXYMETHYLFORMAL
S5	2730	HYDROXYMETHYLENE
S6	0	S5 AND POLYACETAL?
S7	19	POLYACETAL? AND HYDROXYMETH?
S8	14	RD (unique items)

>>>KWIC option is not available in file(s): 41, 77, 399

Set	Items	Description
S1	2	POLYACETAL? (S) (NUCLEIC OR POLYNUCLEOTIDE? OR OLIGONUCLEOTIDE?)
S2	2	RD (unique items)
S3	0	?HYDROXYMETHYLETHYLENE (W) HYDROXYMETHYLFORMAL?
S4	0	HYDROXYMETHYLENE HYDROXYMETHYLFORMAL
S5	2730	HYDROXYMETHYLENE
S6	0	S5 AND POLYACETAL?
S7	19	POLYACETAL? AND HYDROXYMETH?
S8	14	RD (unique items)

>>>KWIC option is not available in file(s): 41, 77, 399

8/3,K/1 (Item 1 from file: 34)  
 DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
 (c) 2002 Inst for Sci Info. All rts. reserv.

07200884 Genuine Article#: 136BF No. References: 11  
**Title: Cationic polymerization of 1,3-dioxepane in the presence of 2,2-bis(\*hydroxymethyl\*)butanol**  
 Author(s): Pan CY (REPRINT) ; Liu Y; Liu W  
 Corporate Source: UNIV SCI & TECHNOL CHINA, DEPT POLYMER SCI & ENGN/HEFEI 230026/ANHUI/PEOPLES R CHINA/ (REPRINT)  
 Journal: JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, 1998, V36, N16 (NOV 30), P2899-2903  
 ISSN: 0887-624X Publication date: 19981130  
 Publisher: JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012  
 Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

**Title: Cationic polymerization of 1,3-dioxepane in the presence of 2,2-bis(\*hydroxymethyl\*)butanol**  
 Abstract: Cationic polymerization of 1,3-dioxepane (DOP) initiated by triflic acid was carried out in the presence of 2,2-bis(\*hydroxymethyl\*)butanol (BHMB). The structure and molecular weight of the products were characterized by GPC and NMR spectra. The results showed that molecular weight of the \*polyacetal\* obtained could be controlled by the initial mole ratio of DOP/BHMB. GPC showed that as the mole ratio of BHMB/DOP increased, the content of cyclic oligomers also increased. Proton, C-13 and 2D HMQC-fg NMR demonstrated that no \*hydroxymethyl\* group of BHMB appeared as an end group. It was also illustrated by proton NMR that some BHMB units existed in cyclic oligomers. The mechanism...

8/3,K/2 (Item 2 from file: 34)  
 DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
 (c) 2002 Inst for Sci Info. All rts. reserv.

01005249 Genuine Article#: FM825 No. References: 0  
**Title: FUNCTIONALIZED \*POLYACETALS\* .2. COPOLYMERIZATION OF TRIOXANE WITH 5-ETHYL-5-\*HYDROXYMETHYL\*-1,3-DIOXANE**  
 Author(s): ZHENG YC; ZHANG CL; YANG NL; BROUSSARD J; AUERBACH A; PAUL J  
 Corporate Source: CUNY COLL STATEN ISL/STATEN ISL//NY/10301; CUNY COLL STATEN ISL/STATEN ISL//NY/10301  
 Journal: MAKROMOLEKULARE CHEMIE-MACROMOLECULAR SYMPOSIA, 1991, V42-3, MAR, P441-450  
 Language: ENGLISH Document Type: ARTICLE (Abstract Available) (NO REFS KEYED)

**Title: FUNCTIONALIZED \*POLYACETALS\* .2. COPOLYMERIZATION OF TRIOXANE WITH 5-ETHYL-5-\*HYDROXYMETHYL\*-1,3-DIOXANE**  
 Abstract: Cationic copolymerization of trioxane with 5-ethyl-5-\*hydroxymethyl\*-1,3-dioxane gives low-molecular-weight copolymer (MBAR(n): 2 approximately 6 x 10(3)) with methylol pendent as well as end groups. Detailed...

8/3,K/3 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

02799874 JICST ACCESSION NUMBER: 96A0568807 FILE SEGMENT: JICST-E  
**Thermal stability improvement of \*polyacetal\* copolymer and its effects.**  
NIINO MASAHIKO (1)  
(1) Asahi Chem. Ind. Co., Ltd.  
Gosei Jushi(Plastics), 1996, VOL.42,NO.6, PAGE.48-49, TBL.1, REF.5  
JOURNAL NUMBER: F0005AAY ISSN NO: 0387-0936  
UNIVERSAL DECIMAL CLASSIFICATION: 678.644  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

**Thermal stability improvement of \*polyacetal\* copolymer and its effects.**

...  
ABSTRACT: There are 2 types of \*polyacetals\*, one is a homopolymer of formaldehyde and the other is a copolymer. The copolymer has a better thermal stability. Techniques for further improvement of the stability are explained in terms of the thermal decomposition mechanisms. The decomposition mechanisms are thought as follows : 1) A zipper type decomposition of unstable \*hydroxymethyl\* terminals.2) Oxidation decomposition of main chains.3) Cutting of main chains by formic acid a decomposed product.4) Cutting of main chains occur over 270.DEG.C..And effective countermeasures for each mechanism are listed as follows : 1) Hydrolysis of the unstable \*hydroxymethyl\* terminals to stable hydroxyethyl terminals.2) Addition of amide-base hindered phenol antioxidants.3) Addition of nitrogen containing compounds such as polamides.  
DESCRIPTORS: \*polyacetal\*;

8/3,K/4 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2002 American Chemical Society. All rts. reserv.

133164482 CA: 133(12)164482z PATENT  
**Novel crystalline ion-association substance, process for producing the same, and polymerization initiator**  
INVENTOR(AUTHOR): Hiwasa, Shin  
LOCATION: Japan,  
ASSIGNEE: Autex, Inc.  
PATENT: PCT International ; WO 200046171 A1 DATE: 20000810  
APPLICATION: WO 2000JP518 (20000131) \*JP 9924294 (19990201)  
PAGES: 65 pp. CODEN: PIXXD2 LANGUAGE: Japanese CLASS: C07C-017/02A;  
C07C-019/00B; C08F-004/603B; C08F-004/70B; C08G-085/00B; C07F-005/02B;  
C07F-015/02B; C08G-059/68B DESIGNATED COUNTRIES: CA; US  
DESIGNATED REGIONAL: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT;  
LU; MC; NL; PT; SE

8/3,K/5 (Item 2 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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133106132 CA: 133(8)106132z PATENT  
**Curable fluoroelastomer compositions containing perfluoropolyether-polyoxymethylene lubricants**  
INVENTOR(AUTHOR): Strepparola, Ezio; Barbieri, Franco  
LOCATION: Italy  
ASSIGNEE: Ausimont S.p.A.  
PATENT: European Pat. Appl. ; EP 1020490 A1 DATE: 20000719  
APPLICATION: EP 99125619 (19991222) \*IT 99MI49 (19990114)  
PAGES: 12 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C08K-005/06A;  
C08K-005/00B; C08L-027/16B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES;  
FR; GB; GR; IT; LI; LU; NL; SE; MC; PT; IE; SI; LT; LV; FI; RO

8/3,K/6 (Item 3 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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118148220 CA: 118(16)148220x PATENT  
**Preparation of 1,3-dioxolane compounds as monomers**  
INVENTOR(AUTHOR): Sugiyama, Tomoki; Koto, Hiroyasu; Takeuchi, Koji  
LOCATION: Japan,  
ASSIGNEE: Ajinomoto Co., Inc.  
PATENT: Japan Kokai Tokkyo Koho ; JP 92312582 A2 ; JP 04312582 DATE:  
921104  
APPLICATION: JP 91162000 (910408)  
PAGES: 7 pp. CODEN: JKXXAF LANGUAGE: Japanese CLASS: C07D-317/24A;  
B01J-023/04B; B01J-031/02B; B01J-031/08B; C07B-061/00; C08G-002/24

8/3,K/7 (Item 4 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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115050534 CA: 115(6)50534r PATENT  
**Novel polyacetal copolymers of trioxane and trimethylolpropane formal derivatives**  
INVENTOR(AUTHOR): Broussard, Jerry A.; Yang, Nan L.; Auerbach, Andrew B.;  
Paul, James L.; Zheng, Yong C.; Zhang, Chong L.  
LOCATION: USA  
ASSIGNEE: Hoechst Celanese Corp.  
PATENT: European Pat. Appl. ; EP 397492 A2 DATE: 901114  
APPLICATION: EP 90305038 (900510) \*US 350799 (890512)  
PAGES: 15 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C08G-002/24A  
DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL;  
SE

8/3,K/8 (Item 5 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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114144153 CA: 114(16)144153x JOURNAL  
**Functionalized polyacetal. 2. Copolymers of trioxane with acrylates of 5-ethyl-5-hydroxymethyl-1,3-dioxane**  
AUTHOR(S): Zheng, Y. C.; Zhang, C. L.; Yang, N. L.; Auerbach, A.;  
Broussard, J.; Paul, J.  
LOCATION: Coll. Staten Island, City Univ. New York, Staten Island, NY,  
10301, USA  
JOURNAL: Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) DATE: 1990  
VOLUME: 31 NUMBER: 2 PAGES: 454-5 CODEN: ACPPAY ISSN: 0032-3934  
LANGUAGE: English

8/3,K/9 (Item 6 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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83059840 CA: 83(8)59840r PATENT  
**Polyacetals**  
LOCATION: USSR  
ASSIGNEE: Institute of Chemical Physics, Chernogolovka; All-Union  
Scientific-Research Institute of Synthetic Rubber; Karaganda Synthetic  
Rubber Plant  
PATENT: Netherlands Appl. NL 7408640 DATE: 741231  
APPLICATION: USSR SU 1929172 DATE: 730628  
PAGES: 27 pp. CODEN: NAXXAN CLASS: C08g

8/3,K/10 (Item 7 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)

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77141568 CA: 77(22)141568t JOURNAL  
New polyacetal, poly(ester-acetal), and their urethane-modified coatings  
from hydroformylated linseed oil  
AUTHOR(S): Khoe, T. H.; Gast, L. E.; Frankel, E. N.; Cowan, J. C.  
LOCATION: North. Reg. Res. Lab., Peoria, Ill.  
JOURNAL: Paintindia DATE: 1972 VOLUME: 22 NUMBER: 7 PAGES: 17-20  
CODEN: PANTAH LANGUAGE: English

8/3,K/11 (Item 8 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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74077982 CA: 74(16)77982g PATENT  
Solid propellant composition with a polymeric binder containing ammonium  
perchlorate and aluminum  
INVENTOR(AUTHOR): Sayles, David C.  
ASSIGNEE: United States Dept. of the Army  
PATENT: United States US 3551225 DATE: 701229  
APPLICATION: United States DATE: 681210  
PAGES: 3 pp. Division of U.S. 3,506,713 CODEN: USXXAM CLASS: 149-19; C  
06b

8/3,K/12 (Item 9 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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66056155 CA: 66(14)56155j PATENT  
Polyacetal terpolymers with random groups derived from a  
methylenebis(4-hydroxymethyl-1,3-dioxolane)  
INVENTOR(AUTHOR): Gottesman, Roy T.; Sidi, Henri; Barth, Robert H.  
ASSIGNEE: Tenneco Chemicals, Inc.  
PATENT: United States US 3293219 DATE: 661220  
APPLICATION: United States DATE: 630710  
PAGES: 4 pp. CODEN: USXXAM CLASS: 260-67

8/3,K/13 (Item 1 from file: 266)  
DIALOG(R)File 266:FEDRIP  
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00363681  
IDENTIFYING NO.: 5R21RR14221-02 AGENCY CODE: CRISP  
BIODEGRADABLE HYDROPHILIC \*POLYACETALS\*  
PRINCIPAL INVESTIGATOR: PAPISOV, MIKHAIL I  
ADDRESS: MASSACHUSETTS GENERAL HOSPITAL 55 FRUIT STREET BOSTON, MA  
02114-2696  
PERFORMING ORG.: MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASSACHUSETTS  
SPONSORING ORG.: NATIONAL CENTER FOR RESEARCH RESOURCES  
FY : 2001

BIODEGRADABLE HYDROPHILIC \*POLYACETALS\*  
...SUMMARY: the surrounding carbons, whereas the potentially bio-  
recognizable structures formed by C1-C2-C3-C4 must be absent. Experimental  
samples of a lead biomimetic \*polyacetal\*, (poly[hydroxymethylethylene  
\*hydroxymethylform\* al]) (PHF), demonstrated excellent biocompatibility,  
extremely low toxicity and negligible interactions in vivo in a sensitive  
graft copolymer circulation test. The objective of this research is  
two-fold: (1) to further test the hypothesis of general bio-inertness of  
hydrophilic \*polyacetals\*; and (2) to initiate translation of the concept  
into a new biomedical technology on the basis of PHF. The expected outcome  
of this study includes: new knowledge on interaction of hydrophilic  
\*polyacetals\* with biological systems; new technologies for producing  
advanced materials for bioengineering, pharmacology, and biomedical  
research; new molecular tools for biomedical research; and a...

8/3,K/14 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
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01404324 ORDER NO: AADAA-I9510745

**ACETAL COPOLYMERS: SYNTHESSES AND MODIFICATION**

Author: ZHENG, YONGCHANG

Degree: PH.D.

Year: 1994

Corporate Source/Institution: CITY UNIVERSITY OF NEW YORK (0046)

Source: VOLUME 55/11-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 4877. 192 PAGES

...5-ethyl-5-hydroxy-methyl-1,3-dioxane and its acrylate ester were synthesized and copolymerized with trioxane. Copolymerization of trioxane with 5-ethyl-5-\*hydroxymethyl\*-1,3-dioxane is characterized by substantial chain transfer. The resulting copolymers are of low molecular weight (3-6  $\times 10^3$ ) but thermally stable. The pendant hydroxyl functional groups have been demonstrated to be reactive for further modification. Copolymerization of trioxane with acrylates of 5-ethyl-5-\*hydroxymethyl\*-1,3-dioxane gives a thermally stable copolymer with molecular weight up to  $60 \times 10^3$ . The structures of these copolymers were studied in detail ...

...trioxane with glycerol formal benzoate or glycerol formal acetate can be hydrolyzed in NaOH suspension to obtain high molecular weight acetal copolymer with hydroxyl groups.

\*Polyacetals\* with backbone and pendant epoxy functional groups were synthesized through the epoxidation of acetal copolymer with backbone or pendant double bond. The reactivity of backbone...  
?